INTERNATIONAL SEARCH REPORT

national Application No

[Comparison of Comparison of Comp

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F04C18/02 F04C23/00 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 F04C - F01C F04D GO1M Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. χ US 4 696 627 A (ASANO HIDEO ET AL) 1,3-529 September 1987 (1987-09-29) Υ figures 1,2 8-12 column 4, line 63 - column 5, line 23 X EP 0 679 810 A (BOC GROUP PLC) 1,2,4,5 2 November 1995 (1995-11-02) the whole document X US 2003/059327 A1 (FUJIOKA TAMOTSU ET AL) 1,3-527 March 2003 (2003-03-27) figures 1,2 column 4, paragraph 29 - paragraph 33 Further documents are listed in the continuation of box C. Patent family members are listed in annex. X Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the *A* document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled "O" document referring to an oral disclosure, use, exhibition or other means in the art. document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 20 October 2004 28/10/2004 Name and mailing address of the ISA **Authorized officer** European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Lequeux, F

INTERNATIONAL SEARCH REPORT

GB2004/003429

0./04:33	-ti DOCUMENTO CONCIDENTO TO DE DEL TRANS-	1.2.7 4020047 003429	
ategory °	ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.	
	appropriate, or the relevant passages		
X	US 6 116 875 A (KOLB ROLAND ET AL) 12 September 2000 (2000-09-12) figures 1,2,5a-5d column 4, line 22 - line 63	1,3-7	
Υ	US 4 919 599 A (REICH GUNTER ET AL) 24 April 1990 (1990-04-24) figures 3,6 column 2, line 59 - column 3, line 20 column 3, line 59 - column 4, line 3 column 4, line 47 - line 65	8-10,12	
A	US 5 228 838 A (GEBELE THOMAS ET AL) 20 July 1993 (1993-07-20) the whole document	8-10,12	
A	US 4 735 084 A (FRUZZETTI PAUL R) 5 April 1988 (1988-04-05) figures 1,2 column 3, line 47 - column 5, line 42	8-10	
Y	US 5 733 104 A (GANSCHOW OTTO ET AL) 31 March 1998 (1998-03-31) figures 1,2,6 column 2, line 52 - line 60 column 5, line 21 - column 6, line 22	8-11	

INTERNATIONAL SEARCH REPORT

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4696627	Α .	29-09-1987	JP JP	62038888 A 62041990 A	19-02-1987 23-02-1987
EP 0679810	A	02-11-1995	EP JP US	0679810 A2 7301185 A 5626469 A	02-11-1995 14-11-1995 06-05-1997
US 2003059327	A1	27-03-2003	JP	2003097456 A	03-04-2003
US 6116875	A	12-09-2000	AT CA CN DE EP JP	229612 T 2245629 A1 1210936 A 59806600 D1 0899423 A1 11132162 A	15-12-2002 26-02-1999 17-03-1999 23-01-2003 03-03-1999 18-05-1999
US 4919599	Α	24-04-1990	EP DE JP	0344345 Al 3865012 Dl 2110335 A	06-12-1989 24-10-1991 23-04-1990
US 5228838	Α	20-07-1993	DE	4213763 A1	28-10-1993
US 4735084	A	05-04-1988	DE EP JP JP JP	3676933 D1 0218458 A2 1785519 C 4078936 B 62087825 A	21-02-1991 15-04-1987 31-08-1993 14-12-1992 22-04-1987
US 5733104	A	31-03-1998	DE EP JP	4331589 A1 0603694 A1 6280785 A	30-06-1994 29-06-1994 04-10-1994